



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/718,427	11/24/2000	Christophe Lacroix	033808.137	1586

7590 04/15/2004

Frederick F. Calvetti
SMITH, GAMBRELL & RUSSELL, LLP
Suite 800
1850 M Street, N.W.
Washington, DC 20036

EXAMINER

SHORT, PATRICIA A

ART UNIT	PAPER NUMBER
----------	--------------

1712

DATE MAILED: 04/15/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/718,427

Applicant(s)

LACROIX ET AL.

Examiner

Patricia A. Short

Art Unit

1712

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 March 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 and 14 is/are pending in the application.
- 4a) Of the above claim(s) 4, 6, 10, 11 and 14 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3, 5, 7-9 and 12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

Art Unit: 1712

This action is in response to an RCE filed March 2, 2004. The amendment filed on February 2, 2004 under 37 CFR 1.116 has been entered.

Claims 4 and 10 withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected inventions, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in Paper No. 9.

Claims 6, 11 and 14 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected species, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in Paper No. 9.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-3, 5, 7-9 and 12 are rejected under 35 U.S.C. 103(a) as obvious over Japanese 62-285947. The reference teaches a thermoplastic polyester composition comprising a thermoplastic component consisting of a thermoplastic polyester and an impact modifier consisting of an ethylene epoxy group containing copolymer and graft copolymer that can be polyacrylate core/methacrylate shell graft copolymer. See the translation at pages 15-16 where compositions containing 100 parts polyester and 25 parts impact modifier consisting of an ethylene epoxy group containing copolymer and polyacrylate core/methacrylate shell graft copolymer in ratios of 40/60 and 10/90 are taught. The core-shell polymer HIA 15 (G) appears have a core of polyacrylate copolymer. See U.S. Patent 4,966,942 at col. 7, lines 20-25, cited in the Office Action mailed November 4, 2003. Additionally, at page 8, of the translation, the graft base polymers include polybutadiene, butadiene copolymer with styrene or methyl (meth)acrylate and acrylate copolymers. The compositions of the reference containing both the ethylene epoxy group containing copolymer and graft copolymer have higher impact strength before and after heat treatment at 160° C and -40° C than compositions containing either impact

Art Unit: 1712

modifier alone. See Table I. As suggested by the reference, it would have been obvious to use a combination of ethylene/unsaturated epoxide copolymer and core-shell polymer having a polybutadiene, polybutadiene/styrene or methyl(meth)acrylate/alkyl(meth)acrylate copolymer core as an impact modifier for a thermoplastic polyester in order to obtain higher impact strength than when using either impact modifier alone.

While impact strength is measured by a different method than recited in the claims, from the teachings of the reference, the combination of impact modifiers would be expected to produce compositions having higher impact strength than either impact modifier used alone, and as there is no evidence that the compositions of the reference do not have higher impact strength when Notched Charpy impact strength is measured as required in the claims, the claims are unpatentable over the reference.

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1-3, 5, 7-9 and 12 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Support for the Notched Charpy impact strength is not apparent. The Tables at page 15 support the limitation only for specific ratios and amounts of ethylene unsaturated epoxide copolymer (B-2) to core-shell copolymer (A) that are not clearly required in the claims. Limitation of the claims to clearly require 60 to 98% by weight of thermoplastic polyester and 2 to 40% by weight of impact modifier where the ratios of (B-2)/(A) are between 40/60 and 10/90 when the impact modifier is between 18 and 40% in 82 to 60% of polyester and the ratios of (B-2)/(A) are between 40/60 and 23/75 when the impact modifier is between 2 and 18% in 98 to 82% of polyester would overcome this rejection.

Application/Control Number: 09/718,427

Page 4

Art Unit: 1712

P. Short

April 12, 2004

Phone (571) 272-1094

Fax (703) 872-9306

PATRICIA A. SHORT
PRIMARY EXAMINER

Patm a Short